Supplementary Material and Methods 1. DNA purification method modified from Bolano et al. (2001)

- In a 1.5 ml Tube add 150 µl of H_2O to 50 µl of Bacterial DNA previously extracted from soil;
- Add 400 µl of phenol-chloroform (1:1, pH=8);
- Vortex the solution for 1 minute;
- Centrifuge the mixture at 13,000 rpm for 30 minutes at 4°C in order to obtain 2 phases: a yellow subnatant phase (phenol-chloroform) and a clear supernatant;
- Transfer 400 µl of supernatant to a new 1.5 ml tube. Attention: Avoid touching the upper subnatant phase with phenol-chloroform;
- Add 400 µl of ethanol (99%), ice cold;
- Pipette up and down or mix the solution obtained without vortex;
- Add 11 µl of sodium acetate 3M;
- Incubate the solution for 2 hours at -20°C;
- Centrifuge the solution for 15 minutes at 4°C at maximum speed (13,000 rpm) – the obtained pellet contained the DNA;
- Discard the flow through;
- Wash the pellet by adding 450 µl ethanol (70%) in order to eliminate the excess salts;
- Vortex the mixture for 20 seconds and centrifuge for 15 minutes at maximum speed (13,000 rpm);
- Discard the flow through and allow the pellet inside the tube to dry (~1 hour);
- Resuspend pellet in 66 µl of H_2O;
- Incubate the solution for 15 minutes at 37°C and then for 15 minutes at 65°C;
- Incubate the solution over night at 4°C.